

CLAIMS

What is claimed is:

- 1 1. A medical aspiration system, comprising:
  - 2 a pump; and,
  - 3 a non-linear flow restrictor coupled to said pump.
  
- 1 2. The system of claim 1, wherein said non-linear  
flow restrictor changes a direction of fluid flow.
  
- 1 3. The system of claim 1, wherein said pump is a  
peristaltic device.
  
- 1 4. The system of claim 1, wherein said pump is a  
venturi device.
  
- 1 5. The system of claim 1, wherein said non-linear  
flow restrictor includes a tube that has a plurality of  
3 bends.
  
- 1 6. A medical cutting system, comprising:

2           a handpiece;  
3           a cutting element attached to said handpiece;  
4           a pump coupled to said handpiece; and,  
5           a non-linear flow restrictor coupled to said pump and  
6    said handpiece.

1           7. The system of claim 6, wherein said non-linear  
2    flow restrictor changes a direction of fluid flow.

1           8. The system of claim 6, wherein said pump is a  
2    peristaltic device.

1           9. The system of claim 6, wherein said pump is a  
2    venturi device.

1           10. The system of claim 6, wherein said non-linear  
2    flow restrictor includes a tube that has a plurality of  
3    bends.

1           11. A medical aspiration system, comprising:  
2           pump means for creating a flow of fluid that has a  
3    pressure and a flowrate; and,

4       flow restrictor means for creating a non-linear  
5    relationship between variations in the pressure and the  
6    flowrate of the fluid.

1       12. The system of claim 11, wherein said flow  
2    restrictor means changes a direction of fluid flow.

1       13. The system of claim 11, wherein said pump means  
2    includes a peristaltic device.

1       14. The system of claim 11, wherein said pump means  
2    includes a venturi device.

1       15. The system of claim 11, wherein said flow  
2    restrictor means includes a tube that has a plurality of  
3    bends.

1       16. A medical cutting system, comprising:  
2       a handpiece;  
3       a cutting element attached to said handpiece;  
4       pump means for creating a flow of fluid that has a  
5    pressure and a flowrate; and,

6 flow restrictor means for creating a non-linear  
7 relationship between variations in the pressure and the  
8 flowrate of the fluid.

1 17. The system of claim 16, wherein said non-linear  
2 flow restrictor means changes a direction of fluid flow.

1 18. The system of claim 16, wherein said pump is a  
2 peristaltic device.

19. The system of claim 16, wherein said pump is a  
venturi device.

20. The system of claim 16, wherein said non-linear  
flow restrictor includes a tube that has a plurality of  
bends.

1 21. A method for aspirating fluid in a medical system,  
2 comprising:

3 creating a flow of fluid that has a pressure and a  
4 flowrate; and,

5           restricting the flow of fluid so that a variation in  
6   the pressure will create a non-linear change in the  
7   flowrate.

1           22. The method of claim 21, changing a direction of  
2   the fluid flow.

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